IN THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the present application.

1. (Currently Amended) A method of producing a semiconductor integrated circuit device, comprising the steps of:

(a) forming a high dielectric constant insulating film over a semiconductor substrate;

(b) forming a conductive film ~~on~~ over the high dielectric constant insulating film;

(c) forming ~~an insulating~~ a mask film ~~on~~over the conductive film;

(d) selectively removing the ~~insulating~~mask film thereby forming a mask pattern;

(e) etching the conductive film by using the ~~insulating~~ mask film having the mask pattern as a mask thereby forming a conductor piece;

(f) removing the ~~insulating film to expose the upper surface of the conductor piece~~ mask film in a state of leaving the high dielectric constant insulating film on both ends of the conductor piece over the semiconductor substrate; ~~and~~

(g) after the step (f), ~~depositing a metal film on the conductor piece and forming a reaction layer at a portion of contact between the conductor piece and the~~

~~metal film~~ removing the high dielectric constant insulating film on both ends of the conductor piece over the semiconductor substrate;

(h) after the step (g), forming semiconductor regions in the semiconductor substrate; and

(i) after the step (h), forming side wall on side surfaces of the conductor piece by depositing an insulating film and anisotropically etching the insulating film..

2. (Currently Amended) A method of producing a semiconductor integrated circuit device according to claim 1,

wherein the conductive film is a silicon film and the mask film ~~the insulating film~~ is a silicon oxide film.

3. (Currently Amended) A method of producing a semiconductor integrated circuit device according to claim 1, further comprising the step of:

(j) after the step (i), depositing a metal film over the conductor piece and forming a reaction layer at a portion of contact between the conductor piece and the metal film,

wherein the conductive film is a silicon film and the reaction layer is a silicide film.

4. (Original) A method of producing a semiconductor integrated circuit device according to claim 1,

wherein the high dielectric constant insulating film is a film having a specific dielectric constant of 2.0 or more.

5. (Original) A method of producing a semiconductor integrated circuit device according to claim 1, further comprising the step of:

(h) before the step (a), forming a trench in the semiconductor region by etching the semiconductor substrate and forming another insulating film in the trench,

wherein the high dielectric constant insulating film has a higher specific dielectric constant than that of another insulating film.

6. (Original) A method of producing a semiconductor integrated circuit device according to claim 1,

wherein the high dielectric constant insulating film comprises an alumina film, a titanium oxide film, a zirconium oxide film, a hafnium oxide film, a tantalum oxide film, or a ruthenium oxide film.

7. (Currently Amended) A method of producing a semiconductor integrated circuit device according to claim 1, ~~further comprising the step of:~~

~~(h) between the step (f) and~~ wherein, in the step (g), ~~removing~~ the high dielectric constant insulating film is removed by using the conductor piece as a mask~~, which is a step of conducting etching~~ under the condition where the etching selectivity of the high dielectric constant insulating film relative to the conductor piece becomes large.

8-9. (Canceled).

10. (Currently Amended) A method of ~~producing~~manufacturing a semiconductor integrated circuit device, comprising the steps of:

(a) ~~forming a first insulating film on a first region of a semiconductor substrate having the first region and a second region~~ providing a semiconductor substrate with a first insulating film formed over a first region of the semiconductor substrate and a second insulating film formed over a second region of the semiconductor substrate wherein a thickness of the first insulating film is greater than a thickness of the second insulating film;

(b) forming a ~~second insulating film having a higher~~ high dielectric constant ~~than the first~~ insulating film ~~on~~over the first insulating film and over the second ~~region~~insulating film;

(c) forming a conductive film ~~on~~over the ~~second~~high dielectric constant insulating film;

(d) forming a ~~third insulating~~ mask film ~~on~~over the conductive film;

(e) selectively removing the ~~third insulating~~ mask film thereby forming a mask pattern ~~to each of the first and second regions~~;

(f) etching the conductive film by using the ~~third insulating~~ mask film having the mask pattern as a mask thereby forming ~~a~~ conductor pieces ~~to each of~~ over the first region and over the second regions;

(g) removing the ~~third insulating~~ mask film in a state of leaving the ~~second~~high dielectric constant insulating film ~~over the semiconductor substrate~~ on both ends of the conductor pieces ~~thereby exposing the upper surface of the conductor piece~~ over the first region and over the second region; ~~and~~

(h) after the step (g), ~~depositing a metal film on the conductor piece and forming a reaction layer at a portion of contact between the conductor piece and the metal film~~ removing the high dielectric constant insulating film on both ends of the conductor pieces over the first region and over the second region;

(i) after the step (h), forming first semiconductor regions in the first region and forming second semiconductor regions in the second region; and

(j) after the step (i), forming side walls on side surfaces of the conductor pieces by depositing an insulating film and anisotropically etching the insulating film.

11. (Currently Amended) A method of producing a semiconductor integrated circuit device according to claim 10,

wherein the conductive film is a silicon film and the ~~third insulating~~ mask film is a silicon oxide film.

12. (Currently Amended) A method of producing a semiconductor integrated circuit device according to claim 10, further comprising the steps of:

(k) after the step (j), depositing a metal film over the conductor pieces and forming reaction layers at portions of contact between the conductor pieces and the metal film,

wherein the conductive film is a silicon film and the reaction layer is a silicide film.

13. (Currently Amended) A method of producing a semiconductor integrated circuit device according to claim 10,

wherein the first insulating film is a silicon oxide film ~~and~~, ~~the~~ second insulating film is a silicon oxide film and the high dielectric constant insulating film is a film having a specific dielectric constant of 2.0 or more.

14. (Currently Amended) A method of producing a semiconductor integrated circuit device according to claim 10,

wherein the ~~second~~ high dielectric constant ~~-~~insulating film comprises an alumina film, a titanium oxide film, a zirconium oxide film, a hafnium oxide film, a tantalum oxide film, or a ruthenium oxide film.

15. (Currently Amended) A method of producing a semiconductor integrated circuit device according to claim 10, ~~further comprising the step of:~~

wherein, ~~(i) between the step (g) and~~ in the step (h), ~~removing~~ the high dielectric constant insulating film is removed by using the conductor piece as a mask, ~~which is a step of conducting etching~~ under the condition where the etching selectivity of the high dielectric constant insulating film relative to the conductor piece becomes large.

16-24. (Canceled).

25. (Currently Amended) A method of producing a semiconductor integrated circuit device according to claim 1,

wherein in the step (f), etching is performed under the condition where the etching selectivity of the ~~insulating~~ mask ~~-~~film relative to the high dielectric constant insulating film is large, thereby removing the ~~insulating film~~ mask to expose the upper surface of the conductor piece in a state of leaving the high dielectric constant insulating film on both ends of the conductor piece over the semiconductor substrate.

26. (Currently Amended) A method of producing a semiconductor integrated circuit device according to claim 10,

wherein, in the step (g), etching is performed under the condition where the etching selectivity of the ~~third insulating~~ mask film relative to the ~~second~~ high dielectric constant insulating film is large, thereby removing the ~~third insulating film~~ mask to expose the upper surfaces of the conductor pieces in a state of leaving the ~~second~~ high dielectric constant insulating film on both ends of the conductor pieces over the ~~semiconductor substrate~~first region and over the second region.

27. (New) A method of producing a semiconductor integrated circuit device according to claim 1, wherein the side walls are formed on side surfaces of the high dielectric constant insulating film.

28. (New) A method of producing a semiconductor integrated circuit device according to claim 10, wherein the side walls are formed on side surfaces the high dielectric constant insulating film at the first region and at the second region.